

# EXHIBIT A



Visteon

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## Online Invention Disclosure: View Invention Disclosure

Inv. Discl. Docket No:	V203-0001
Creation Date:	1/2/03
Approval to submit was given by:	PNASHIF: 02-JAN-03

### Section 1: INVENTION DESCRIPTION

Title of Invention:	WIRELESS/IR HEADPHONES WITH INTEGRATED REAR SEAT AUDIO CONTROL FOR AUTOMOTIVE ENTERTAINMENT SYSTEM
Patent Evaluation Committee:	\$VTM
CPSC Code:	15.00.00
Originating Country Code:	US
Related Disclosure(s):	<input checked="" type="checkbox"/> None

### Section 2: PROBLEM & SOLUTION

Description or Comments:	-An automotive multimedia entertainment system includes an integrated rear seat entertainment module with main purpose of audio sources selection and car's radio access for rear seats passengers. The audio signal destination is a pair of headphones wired or wireless connected with the module. -The specific customer requirements, module's bezel's color and the number of audio sources switched, together with selection of multiple types of consoles in which these modules are connected are generating a complexity issue for rear seat module supplier, car's harness supplier and system user. -The main advantage of Wireless/IR headphones with integrated remote controls capabilities is simplicity of the new system in which the headphones user will have the possibility to select the desired audio source and radio's functions by touching a pair of buttons included in headphones' housing near On/Off and Volume buttons. -The electrical harnesses used in all rear seat systems for
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connecting the electronic module to radio and audio sources in the car are replaced by IR/wireless connections between headphones unit and radio. -The radio will have attached a wireless/IR transceiver for audio and communication with headphones unit and the additional multiplexing capability according with the number of audio sources required in car's entertainment system. -In a car without a console(overhead unit or not)the rear seats passengers will have the possibility to listen a different audio source in headphones with remote control capabilities for the existent radio unit's features. -Key Off current is null and the system can be easier expanded to include more wireless control and new users without any mechanical intervention. -The rear seats passengers can have easy access control without leaving the belted positions. -Implementation issues include possible transmission of the signal outside of the vehicle without any wired connection and EMC issues.

**Attachment:**

See Section:9 ATTACHMENTS

**Section 3: PRIOR ART****Description or  
Comments:**

The invention concerns an wireless/IR headphones with remote control features included into an entertainment system for cars instead of a rear seat control module. Rear seat audio control is known as in U.S. Pat. No. 5,661,811 to Hueman et al. wherein a rear control having media programming buttons is sending control command to a microprocessor for controlling a medium selected by the rear control. A rear seat audio and video entertainment system for a passenger vehicle is presented in U.S. Pat. No. 6,330,337 Nicholson et al. wherein audio signals coordinated with video entertainment devices in the rear seat can be reproduced using vehicle's audio system.

**Attachment:**

See Section:9 ATTACHMENTS

**Section 4: DETAILED DESCRIPTION****Description or  
Comments:**

Referring to Fig.1, a multimedia entertainment system for a vehicle include a Radio unit capable to switch internally more than one audio sources in Dual mode (existent Rear Seat Control mode) and to turn off the rear speakers according with a remote command (RF or IR wave). The radio has a RF or IR transmitter (1) for the headphones input (the rear radio channel) and an IR or RF receiver (2) for audio sources selection and radio command access by the rear seats

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passengers. The headphones unit (3) has two wireless connections with the radio unit (RF or IR) and does include an RF/IR receiver and a RF/IR emitter or both integrated in the same module an IR/RF transceiver for audio signal receiving and command transmission tasks. In headphones unit figure (Fig.2) are represented a pairs of buttons (5,6/7,8)for Radio controls selection and a wireless communication unit for a transceiver (4) or a pair of IR /RF audio receiver with IR (SIRC)serial infrared control transmitter or (ASK) amplitude shift keying. The system can include a higher range signal module for outside of car audio reception and control selection as needed. Claims:

- Car entertainment system which is controlled by wireless headphones for rear seat audio controls.
- Dual Play function of turning off the rear speaker controlled inside the radio(not in rear seat module).
- Turning ON power in headphones enters Dual Play mode and enables rear seat control.
- Entertainment system control from outside of vehicle.
- Allows users addition without increasing controllers number ,harnesses or network software.

Attachment:

See Section:9 ATTACHMENTS

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**Section 5: DATES**

**Record(s) of Completion:** This is the first record of invention. It was recorded on Mon Oct 21 15:06:05 EDT 2002.

**Date of Completion:**

**First Production Use:**

**[Model and Date]**

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**Section 6: MISCELLANEOUS ITEMS**

**Is it a Government Contract?:**

No

**If yes, Government Contract Number:**

**Identify a government agreement, partnership, consortium, or other company involved with conception or first building of the invention:**

**If disclosed to non-Company personnel, identify recipient and date:**

None

**Identify potential licensing opportunities within and, as appropriate, outside the auto industry. If possible, name potential companies that should be contacted:**

None

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**Section 7: ATTACHMENTS**

CONFIDENTIAL: Invention Disclosure

<http://hub.nt.vis.com/olid/FGTI/FGTIPrintAll.asp?V203-0001>

File Name Click on File Name to view and print it.	Description
<a href="#">32857HPrsc1.doc</a>	Multimedia entertainment system that includes wireless headphones with RSC capability .
<a href="#">32857HPrsc2.doc</a>	Headphones with audio rear seats controls capability .

**Section 8: INVENTORSHIP****CDS or Other Id:**

PNASHIF

**Last Name:**

Nashif

**First Name:**

Peter

**Middle Name:**

Joseph

**Employment Category:**

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**Employment Status:**

A

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**Social Security or Company ID Number:**

[This field is blocked out intentionally.]

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**Home Address Line 2:**

[REDACTED]

**City, State & Zip Code:**

[REDACTED]

**Country Code:**

[REDACTED]

**Employee of:**

[REDACTED]

**Department:**

[REDACTED]

**Organization Code:**

[REDACTED]

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**Payroll Location Code:**

[REDACTED]

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**Supervisor's CDS Id:**

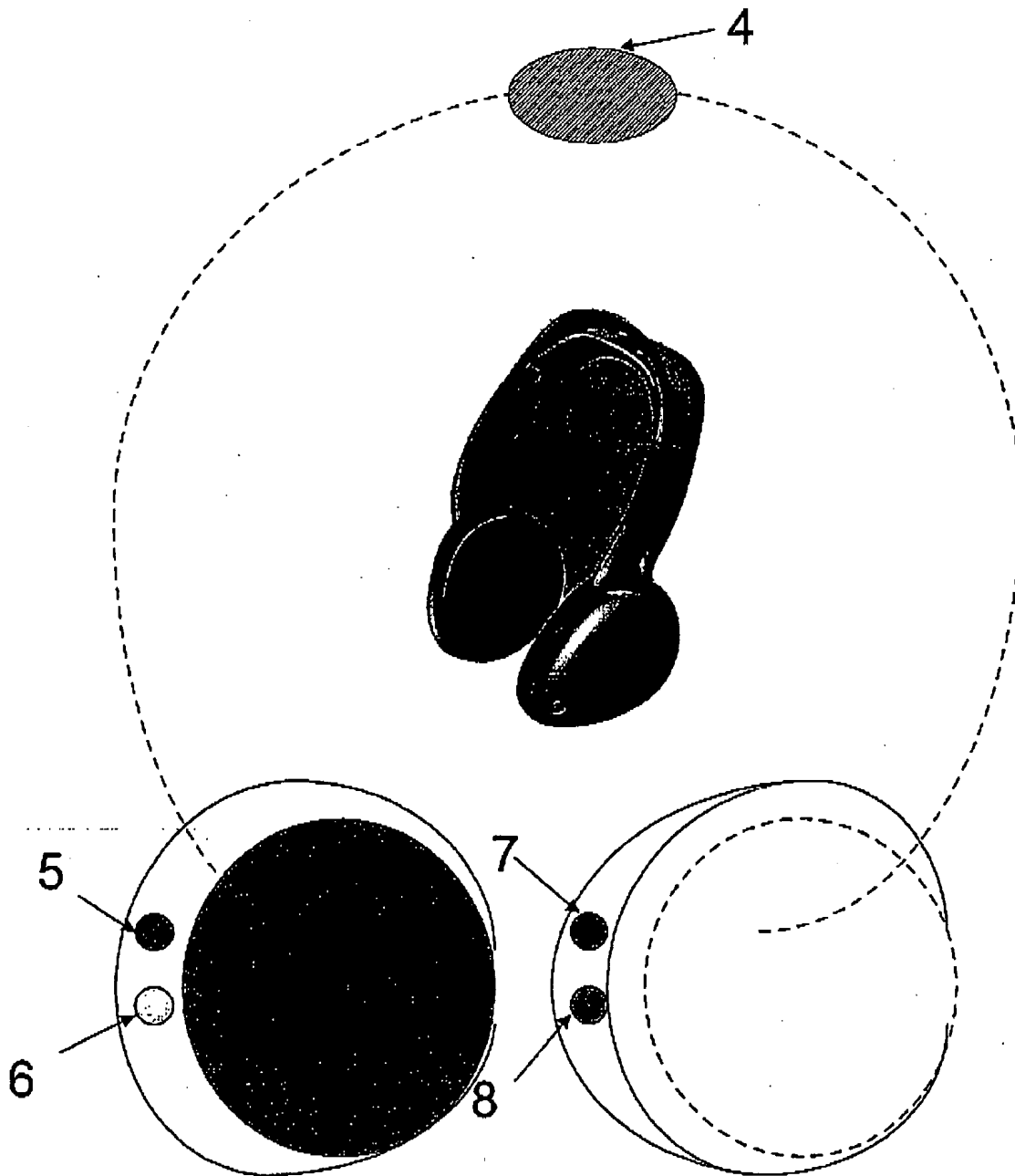
[REDACTED]

**Manager's CDS Id:**

[REDACTED]

Owner: VGTI | Version 1.0 | Last Updated: November 12, 2001

Fig.2



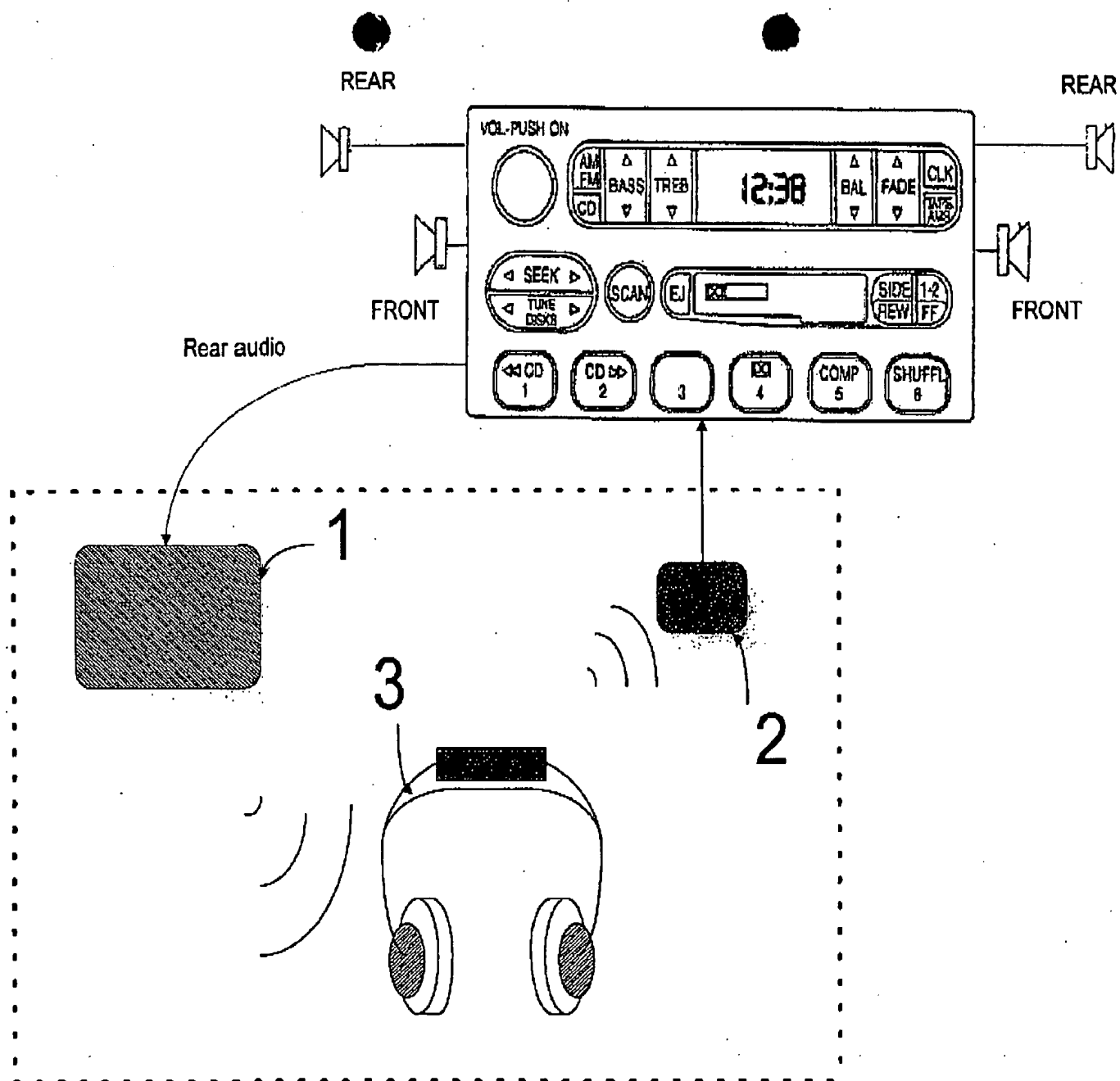


Fig.1